UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

## BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 15

Serial Number: 08/510,740 Filing Date: 08/02/95 Appellant(s): Chen et al.

Richard J. Paciulan For Appellant

## EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed 12/23/96.

(1) Status of claims.

The statement of the status of claims contained in the brief is correct.

(2) Status of Amendments After Final.

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(3) Summary of invention.

The summary of invention contained in the brief is correct.

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(4) Issues.

The appellant's statement of the issues in the brief is correct.

(5) Grouping of claims.

The rejection of claims 1-4 stands or falls together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together. See 37 C.F.R. \$ 1.192(c)(5).

(6) Claims appealed.

The copy of the appealed claims contained in the Appendix to the brief is correct.

(7) Prior Art of record.

No prior art is relied upon by the examiner in the rejection of claims under appeal.

(8) New prior art.

No new prior art has been applied in this examiner's answer.

(11) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims.

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## Claim Rejections - 35 USC § 101

- 1. Claims 1-4 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. This rejection is set forth in the prior Office action paper number 9.
  - (10) New ground of rejection.

This Examiner's Answer does not contain any new ground of rejection.

- (11) Response to argument.
- 2. Applicant's arguments filed 12/23/96 have been fully considered but they are not deemed to be persuasive.

Applicant argues that claims 1-4 are directed to statutory subject matter. More specifically applicant argues that applying the same logic and reasoning as the CAFC did in Alappat, it is submitted that there is no reason why a different conclusion as to patentable subject matter should be reached in the present application. Applicant further argues that the similarity between claim 1 of the present invention and claim 15 of Alappat's application, along with the similarity between the subject matter of the claims in both applications, leads to the conclusion that the claims of the present application are directed to statutory

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subject matter as required under 35 USC 101. See applicant's appeal brief, page 17, 2nd full paragraph.

With respect to the above arguments, the examiner contends that claims 1-4 are not analogous to claim 15 of Alappat. In Alappat's application, claim 15 is written in means-plus function. The "means" clauses in claim 15 must be construed to cover the corresponding structure described in the specification and equivalents thereof. 35 USC 112, sixth paragraph; see In re Donaldson Co., 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994). Accordingly, it is held that the means elements of claims 15, in view of the specification, do represent specific digital circuitry structure.

Claims 1-4 in the present application are not written in means-plus function. Neither do the claims recite a general purpose computer programmed to perform the claimed calculations. As is readily apparent from a reading of the claims on appeal, the steps of:

- . aligning ...
- . defining ...
- . subtracting ...
- . setting ...
- . inverting ...
- . shift ...
- . adding ...

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directly recite a mathematical algorithm (see specification, pages 6-8). Therefore, claims 1-4 are not analogous to claim 15 of <u>Alappat</u>'s application since they are not written in means-plus functions that represent specific digital circuitry structure.

In contrast, claims 1-4 and the disclosure are directed to the solution of a mathematical problem. As noted in the guidelines, an invention that merely manipulates an abstract idea or solves a purely mathematical problem without any practical limitation is deemed non-statutory subject matter. The mere determination of an answer (quotient) and storing the same does not qualify as a practical limitation.

Therefore, it is readily apparent that when claims 1-4 are each taken as a whole, the claims are directed to the preemption of a mathematical algorithm, and thus are non statutory.

For the above reasons, it is believed that the 35 USC 101 non-statutory rejection of claims 1-4 should be sustained.

Respectfully submitted,

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Supervisory Patent Examiner

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March 27, 1997

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